

Attorney Docket No.: 01CON335P  
Application Serial No.: 09/940,904

### REMARKS

By the present amendment, applicant has cancelled claims 3, 21 and 37-41, amended claims 1 and 19, and added new claims 42-47. After the present amendment, claims 1-2, 4-20, 22-36 and 42-47 are pending in the application. Applicant acknowledges and appreciates the Examiner's allowance of claims 10-15 and 28-33. Reconsideration and allowance of claims 1-2, 4-9, 16-20, 22-27, 34-36 and 42-47 in view of the following remarks are respectfully requested.

**A. Rejection of Claims 1-6, 16-24 and 34-41 under 35 U.S.C. § 103(a).**

The Examiner has rejected claims 1-6, 16-24 and 34-41, under 35 U.S.C. § 103(a), as being unpatentable over Swaminatham, et al. (USPN 5,596,676) ("Swaminatham") in view of Kataoka, et al. (USPN 5,825,311) ("Kataoka"). Applicant respectfully disagrees.

By the present amendment, applicant has amended independent claim 1 to recite "calculating a pitch enhancement coefficient based on the one of the at least two fixed subcodebooks, wherein the pitch enhancement coefficient is calculated according to a quantized long term predictor gain of a previous subframe multiplied by a factor that is different for each of the at least two fixed subcodebooks." Applicant respectfully submits that the pitch enhancement coefficient calculation of claim 1, as amended, is not disclosed, taught or suggested by either Kataoka or Swaminatham. It is respectfully submitted that the support for this amendment may, for example, be found on page 21 of the present application. Accordingly, claim 1, as amended, should be allowed at least for this reason.

Furthermore, as acknowledged by the Examiner, applicant respectfully submits that Swaminatham fails to disclose, teach or suggest that the pitch enhancement coefficient is

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calculated based on the selected fixed subcodebook, where a different formula is used for calculating the pitch enhancement coefficient for each of the at least two fixed subcodebooks. This feature of the present invention is technically superior to prior art schemes and that of Swaminatham, because it increases excitation density.

However, the Examiner states that Kataoka discloses the above element, which is missing from Swaminatham. To this end, the Examiner cites column 9, lines 31-61 of Kataoka, as disclosing such element. A close review of Kataoka reveals that Kataoka fails to disclose, teach or suggest that the pitch enhancement coefficient is calculated based on the selected fixed subcodebook, where a different formula is used for calculating the pitch enhancement coefficient for each of the at least two fixed subcodebooks. Applicant respectfully submits that Kataoka does not come close to disclosing, teaching or suggesting that the fixed codebook 43 of Kataoka includes a plurality of fixed subcodebooks, where one fixed subcodebooks is selected, and that the pitch enhancement coefficient is calculated based on the selected fixed subcodebook, where a different formula is used for calculating the pitch enhancement coefficient for each of the at least two fixed subcodebooks. To the contrary, Kataoka discusses gain codebooks CB1 and CB2, as shown in FIG. 5. Furthermore, Kataoka does not disclose that one of CB1 or CB2 is selected, and based on the selected gain codebook, a different formula is used for calculating the pitch enhancement coefficient. In fact, Kataoka teaches that vector comb 3 combines the outputs.

Applicant respectfully submits that there is also no teaching in either Swaminatham or Kataoka to use a different formula for calculating the pitch enhancement coefficient for each fixed subcodebook. Kataoka merely described applying different gains to two different gain codebooks CB1 and CB2, where the results are combined. The same approach is not applicable

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to fixed subcodebooks, where one is selected and a different formula is used for calculating the pitch enhancement coefficient for the selected fixed subcodebook. This difference becomes even more apparent, by noting that Kataoka's approach to gain codebooks is not aimed at increasing excitation density and, thus, Kataoka's approach is very different than that of claim 1 of the present invention and aimed at a different result.

Accordingly, applicant respectfully submits that claim 1 and its dependent claims 2, 4-6 and 16-18 should be allowed.

Furthermore, independent claim 19 has been amended to include the above-discussed limitations of claim 1 and recites "wherein the pitch enhancement coefficient is calculated according to a quantized long term predictor gain of a previous subframe multiplied by a factor that is different for each of the at least two fixed subcodebooks." For the reasons stated above, applicant respectfully submits that claim 19 and its dependent claims 20, 22-24 and 34-36 should also be allowed.

**B. Rejection of Claims 7-9 and 25-27 under 35 U.S.C. § 103(a)**

The Examiner has rejected claims 7-9 and 25-27 under 35 U.S.C. § 103(a), as being unpatentable over Swaminatham in view of Kataoka, and further in view of Yeldener, et al. (USPN 5,774,837) ("Yeldener").

Applicant respectfully submits that claims 7-9 and 25-27 depend from claims 1 and 19, respectively. Accordingly, at least for the same reasons stated above, claims 7-9 and 25-27 should also be allowed.

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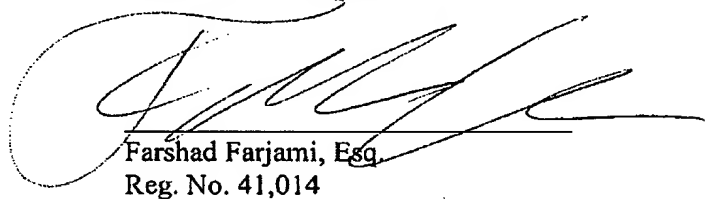
C. New Claims 42-47

By the present amendment, applicant has added new claims 42-44 and 45-47, which depend from claims 1 and 19, respectively. It is respectfully submitted that the support for these new claims may, for example, be found on page 21 of the present application. Applicant respectfully submits that the cited references fail to disclose, teach or suggest the limitations of new claims 42-44 and 45-47. Further, new claims 42-44 and 45-47 depend from claims 1 and 19, respectively, and at least for the same reasons stated above, new claims 42-44 and 45-47 should also be allowed

D. Conclusion

For all the foregoing reasons, an early notice of allowance for claims 1-2, 4-20, 22-36 and 42-47 pending in the present application is respectfully requested. The Examiner is invited to contact the undersigned for any questions.

Respectfully Submitted;  
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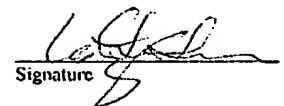
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